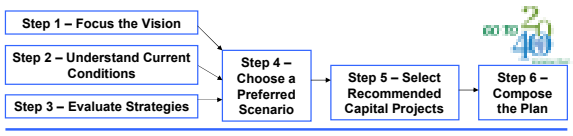

Scenario Construction Framework

Transportation Committee

June 20, 2008

Baseline scenario features

- Logical and internally consistent combinations of potential actions
- Should result in reasonable, possible views of the future
- Purpose is to assist in prioritization of actions that may be recommended in plan
- Overall improvement in vision areas, including environment
- Minimum standards or “floors” in each scenario

Baseline scenario features, part 2

- Cost constraints – either costs held equal between scenarios, or tradeoffs of higher costs are explicitly stated
- Used as *examples*, not full range of possible options
- Designed with communication to public in mind
- Approximately four alternative scenarios are recommended

Alternative scenario construction themes

Dimensions of variables

Correspond to CMAP working committees: economic development, environment, housing, human services, land use, transportation

Potential scenario themes

Intensity of implementation

Maximize one goal over others

Focus of investment

"Thematic" scenarios

Intensity – Envision Utah example

Maximizing one goal over others

Potential scenarios

1. Reference / baseline. Reflection of current trends.
2. Environment focus. Scenario includes alternative transportation, land preservation, ecosystem restoration, conservation design, and other strategies with environmental benefits.
3. Economy focus. Scenario includes business development programs, improved education, additional freight and intermodal facilities, and other strategies with economic benefits.
4. Equity focus. Scenario includes reinvestment in declining communities, affordable housing policies, and other strategies that improve regional equity.

Focus of investment

Potential scenarios

1. Reference / baseline. Reflection of current trends.
2. Infrastructure investment. Dedicate additional funds to infrastructure improvements, particularly in the areas of transportation and communications.
3. Education / workforce investment. Dedicate additional funds to improving the education system and training the workforce in skills needed for economic competitiveness.
4. Environmental / energy investment. Dedicate additional funds to improving our environment and minimizing the environmental impacts of our activities, including reducing energy consumption.

"Thematic" scenarios

Potential scenarios

1. Reference / baseline. Reflection of current trends.
2. Preservation. Preserves aspects of the region that are valued, including ecosystems, agriculture, architecture, housing stock, and others.
3. Infill and reinvestment. Features redevelopment and densification in existing communities, including brownfield development, transit-oriented development, and other strategies.
4. New technology. Relies on new technologies in transportation, environment, and service provision to meet region's needs.
5. Burnham scenario. Builds on legacy of Burnham Plan, with large new green spaces, transportation facilities including freight, and infrastructure investments to make region globally competitive.

"Thematic" scenarios

Construct scenarios based on alternative courses of action for meeting goals (based on major themes of vision):

Environment	Transportation
Energy conservation	Coordinated planning
Water	Civic involvement
Housing	Quality of life (arts and culture)
Public health and safety	Sustainability
Education	Equity
Economic competitiveness	Innovation
Reinvestment	

Each scenario should include actions that meet our goals in each vision theme

Intensity – strategy matrix

Scenario 1 (least planning)	Scenario 2 (moderate planning)	Scenario 3 (most planning)
- No strategies	- Strategy 1 - Strategy 2 - Strategy 3 - Strategy 4	- Strategy 1 - Strategy 2 - Strategy 3 - Strategy 4 ↓ - Strategy X

Maximizing one goal over others – strategy matrix

Scenario 1 (environment)	Scenario 2 (economy)	Scenario 3 (equity)
- Env. Strategy 1 - Env. Strategy 2 - Env. Strategy 3 - Env. Strategy 4	- Econ. Strategy 1 - Econ. Strategy 2 - Econ. Strategy 3 - Econ. Strategy 4	- Equity Strategy 1 - Equity Strategy 2 - Equity Strategy 3 - Equity Strategy 4

"Thematic" – strategy matrix

Scenario 1 (technology)	Scenario 2 (reinvestment)	Scenario 3 (preservation)
- Strategy 1 - Strategy 2 - Strategy 3 - Strategy 4	- Strategy 5 - Strategy 6 - Strategy 7 - Strategy 8	- Strategy 9 - Strategy 10 - Strategy 11 - Strategy 12

"Thematic" – strategy matrix

Vision area	Scenario 1	Scenario 2	Scenario 3
Transportation	Strategies TBD	Strategies TBD	Strategies TBD
Environment	Strategies TBD	Strategies TBD	Strategies TBD
Energy	Strategies TBD	Strategies TBD	Strategies TBD
Housing	Strategies TBD	Strategies TBD	Strategies TBD
Economic competitiveness	Strategies TBD	Strategies TBD	Strategies TBD
And so on…			

"Thematic" – strategy matrix

Sample organization – transportation strategies

Scenario 1	Scenario 2	Scenario 3
Locate new jobs and housing near to transit facilities and ensure mixed uses in new development, reducing the need for travel. - TOD - urban design / walkable communities - affordable housing policies	Focus investment on operations and minor capital improvements, using the existing system more fully. - transit operations - bicycling - access management - pricing and managed lanes - ITS applications	Invest heavily in major capital improvements to meet existing and future travel demand. - highway additions or expansions - transit extensions or expansions - major new capital projects

Questions for discussion

Staff recommendation is for "thematic" scenarios to be developed by involving committees and stakeholders

Committee discussion requested on:

- Pros and cons of each scenario construction method
  - Intensity
  - Maximizing one goal over others
  - Investment focus
  - "Thematic"
- Most effective way for committee to be involved in scenario construction